

ADDENDUM #2

Freezeout Lake WMA Cold Storage Building FWP #7179102

Near Fairfield, Montana

March 28, 2018

Bidders for the above listed project are hereby notified that the following changes have been made to the bid documents:

1. **Add TECHNICAL SPECIFICATION – SECTION 13 3419 METAL BUILDING SYSTEM:**

See attached. This specification is applicable only if a metal building system is substituted for post and frame building construction as described in addendum #1.

2. **Replace TECHNICAL SPECIFICATION – SECTION 07 4113 METAL ROOF PANELS, 2.01.B.3 as follows**

3. Profile: vertical, delta rib style

3. **Replace TECHNICAL SPECIFICATION – SECTION 07 4213 METAL WALL PANELS, 2.01.B.4 as follows:**

4. Panel Depth: 5/8-inches or 3/4-inches

4. **Delete TECHNICAL SPECIFICATION – SECTION 07 4213 METAL WALL PANELS, 2.01.C.**

There are no soffit panels on this project.

5. **Modify DRAWING C2 – Construction Note #10 as follows:**

Delete all references requiring testing of the parking subgrade or gravel.

6. **Add note to DRAWING C5 as follows:**

Note: If Additive Alternate #4 – Plywood Sheeting is awarded in combination with the Contractor selected metal building package allowed in Addendum #1, the electrical installation will be modified as necessary to meet electrical codes.

7. Add the following **Special Provision 15 – Measurement and Payment, Section E. Basis of Payment, Item 13. Plywood Sheeting, Subsection Work Included:**
- All modifications required to meet electrical code caused by the installation of the interior plywood sheeting. This applies if the Contractor chooses a metal building package for the building construction system.

8. Light Fixture – Prior Approvals:

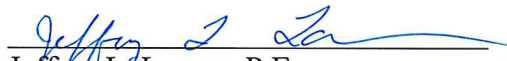
The following light fixtures have been reviewed as equals, subject to final approval, to specified light fixtures:

Fixture “A”	ILP, LSI, HE Williams
Fixture “B”	Hubbell, Maximus, WF Harris (LED only)

9. Sectional Door – Prior Approvals:

The following sectional door has been reviewed as an equal, subject to final approval, to specified sectional doors:

Raynor TC320


Jeffrey L. Larson, P.E.

PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE DESIGNATED PLACE IN THE BID FORM AND ON THE FACE OF THE ENVELOPE.

SECTION 13 3419
METAL BUILDING SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Manufacturer-engineered, shop-fabricated structural steel building frame.
- B. Metal wall and roof panels including gutters and downspouts.
- C. Exterior doors and overhead doors.

1.02 RELATED REQUIREMENTS

- A. Section 08 1113 - Hollow Metal Doors and Frames.
- B. Section 08 3613 - Sectional Doors.

1.03 REFERENCE STANDARDS

- A. AISC 360 - Specification for Structural Steel Buildings; 2010.
- B. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2014.
- C. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.
- D. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength; 2014.
- E. ASTM A325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength; 2014.
- F. ASTM A325M - Standard Specification for Structural Bolts, Steel, Heat Treated 830 MPa Minimum Tensile Strength (Metric); 2014.
- G. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2013.
- H. ASTM A501/A501M - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing; 2014.
- I. ASTM A529/A529M - Standard Specification for High-Strength Carbon-Manganese Steel of Structural Quality; 2014.
- J. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.
- K. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.
- L. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink); 2014.
- M. ASTM F3125/F3125M - Standard Specification for High Strength Structural Bolts, Steel and Alloy Steel, Heat Treated, 120 ksi (830 MPa) and 150 ksi (1040 MPa) Minimum Tensile Strength, Inch and Metric Dimensions; 2015a.
- N. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination; 2012.
- O. IAS AC472 - Accreditation Criteria for Inspection Programs for Manufacturers of Metal Building Systems; 2012.
- P. MBMA (MBSM) - Metal Building Systems Manual; Metal Building Manufacturers Association; 2012.
- Q. SSPC-Paint 20 - Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic"); 2002 (Ed. 2004).
- R. UL 580 - Standard for Tests for Uplift Resistance of Roof Assemblies; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene one week before starting work of this section.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on profiles, component dimensions, fasteners.
- C. Shop Drawings: Indicate assembly dimensions, locations of structural members, connections; wall and roof system dimensions, panel layout, general construction details, anchorages and method of anchorage, installation; framing anchor bolt settings, sizes, and locations from datum, foundation loads; indicate welded connections with AWS A2.4 welding symbols; indicate net weld lengths; provide professional seal and signature.
- D. Samples: Submit two samples of precoated metal panels for each color selected, 12 by 12 inch in size illustrating color and texture of finish.
- E. Manufacturer's Instructions: Indicate preparation requirements, anchor bolt placement, and miscellaneous connection details.
- F. Erection Drawings: Indicate members by label, assembly sequence, and temporary erection bracing.
- G. Manufacturer Qualification Statement: Provide documentation showing metal building manufacturer is accredited under IAS AC472.
 - 1. Include statement that manufacturer designs and fabricates metal building system as integrated components and assemblies, including but not limited to primary structural members, secondary members, joints, roof, and wall cladding components specifically designed to support and transfer loads and properly assembled components form a complete or partial building shell.
- H. Project Record Documents: Record actual locations of concealed components and utilities.

1.06 QUALITY ASSURANCE

- A. Design structural components, develop shop drawings, and perform shop and site work under direct supervision of a Professional Structural Engineer experienced in design of this Work.
 - 1. Design Engineer Qualifications: Licensed in Montana.
 - 2. Conform to applicable code for submission of design calculations as required for acquiring permits.
 - 3. Cooperate with regulatory agency or authority and provide data as requested.
- B. Perform work in accordance with AISC 360 and MBMA (MBSM).
- C. Manufacturer Qualifications: Company specializing in the manufacture of products similar to those required for this project.
 - 1. Not less than 3 years of documented experience
 - 2. Accredited by IAS in accordance with IAS AC472.
- D. Erector Qualifications: Company specializing in performing the work of this section with minimum three years documented experience.

1.07 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.
- C. Provide five year manufacturer warranty for metal building system.
 - 1. Include coverage for exterior pre-finished surfaces to cover pre-finished color coat against chipping, cracking or crazing, blistering, peeling, chalking, or fading. Include coverage for weather tightness of building enclosure elements after installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Metal Buildings:

1. Butler Manufacturing Company: www.butlermfg.com.
2. Chief Buildings: www.chiefbuildings.com/sle.
3. Metallic Building Company: www.metallic.com.
4. Nucor Building Systems: www.nucorbuildingsystems.com.
5. VP Buildings: www.vp.com.
6. Substitutions: See Section 01 6000 - Product Requirements.

2.02 METAL BUILDING

- A. Single span rigid frame.
- B. Bay Spacing: 20 ft.
- C. Primary Framing: Rigid frame of rafter beams and columns, end wall columns, and wind bracing.
- D. Secondary Framing: Purlins, and other items detailed.
- E. Wall System: Preformed metal panels of vertical profile, with sub-girt framing/anchorage assembly, and accessory components.
- F. Roof System: Preformed metal panels oriented parallel to slope, with sub-girt framing/anchorage assembly, and accessory components.
- G. Roof Slope: Refer to drawings.

2.03 MATERIALS - FRAMING

- A. Structural Steel Members: ASTM A36/A36M.
- B. Structural Tubing: ASTM A500/A500M, Grade B cold-formed.
- C. Plate or Bar Stock: ASTM A529/A529M, Grade 50.
- D. Anchor Bolts: ASTM A307, galvanized to ASTM A153/A153M.
- E. Bolts, Nuts, and Washers: ASTM F3125/F3125M, Type 1; galvanized to ASTM A153/A153M.
- F. Welding Materials: Type required for materials being welded.
- G. Primer: SSPC-Paint 20, zinc rich.
- H. Grout: ASTM C1107/C1107M; Non-shrink; premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents.
 1. Minimum Compressive Strength at 48 Hours: 2,000 pounds per square inch.
 2. Minimum Compressive Strength at 28 Days: 7,000 pounds per square inch.

2.04 MATERIALS - WALLS AND ROOF

- A. Steel Sheet: Hot-dipped galvanized steel sheet, ASTM A653/A653M, Designation SS (structural steel), Grade 33 (230), with G90/Z275 coating.
- B. Joint Seal Gaskets: Manufacturer's standard type.
- C. Fasteners: Manufacturer's standard type, galvanized to comply with requirements of ASTM A153/A153M, finish to match adjacent surfaces when exterior exposed.
- D. Sealant: ASTM C920, elastomeric sealant with movement capability of at least plus/minus 50 percent; 100 percent silicone; for exposed applications, match adjacent colors as closely as possible.
- E. Trim, Closure Pieces, Caps, Flashings, Gutters, Downspouts, Rain Water Diverter, Fascias, and Infills: Same material, thickness and finish as exterior sheets; brake formed to required profiles.

2.05 ACCESSORY COMPONENTS

- A. Doors and Frames: Specified in Section 08 1113.
- B. Overhead Doors: Specified in Section 08 3613.

2.06 DESIGN CRITERIA

- A. Installed Thermal Resistance of Wall System: R-value of 21.
- B. Installed Thermal Resistance of Roof System: R-value of 38.
- C. Design members to withstand dead load, applicable snow load, and design loads due to pressure and suction of wind calculated in accordance with applicable code.
- D. Design members to withstand ____ psf live load, 40 psf nominal snow load, and ____ psf positive and negative wind loads.
- E. Design members to withstand UL 580 Uplift Class 60.
- F. Exterior wall and roof system shall withstand imposed loads with maximum allowable deflection of 1/90 of span.
- G. Provide drainage to exterior for water entering or condensation occurring within wall or roof system.
- H. Permit movement of components without buckling, failure of joint seals, undue stress on fasteners or other detrimental effects, when subject to temperature range of 180 degrees F.
- I. Size and fabricate wall and roof systems free of distortion or defects detrimental to appearance or performance.

2.07 FABRICATION - FRAMING

- A. Fabricate members in accordance with AISC 360 for plate, bar, tube, or rolled structural shapes.
- B. Anchor Bolts: Formed with bent shank, assembled with template for casting into concrete.
- C. Provide wall opening framing for doors, windows, and other accessory components.

2.08 FABRICATION - WALL AND ROOF PANELS

- A. Siding: Minimum .018 inch metal thickness, manufacturer's profile indicated, 1-1/2 inch deep, lapped edges fitted with continuous gaskets.
- B. Roofing: Minimum .024 inch metal thickness, manufacturer's profile, lapped edges fitted with continuous gaskets.
- C. Girts/Purlins: Rolled formed structural shape to receive siding, roofing sheet.
- D. Internal and External Corners: Same material thickness and finish as adjacent material, profile brake formed to required angles. Back brace mitered internal corners with 1/8" inch thick sheet.
- E. Expansion Joints: Same material and finish as adjacent material where exposed, 1/8" inch thick, manufacturer's standard brake formed type, of profile to suit system.
- F. Flashings, Closure Pieces, Fascia: Same material and finish as adjacent material, profile to suit system.
- G. Fasteners: To maintain load requirements and weather tight installation, same finish as cladding, non-corrosive type.

2.09 FABRICATION - GUTTERS AND DOWNSPOUTS

- A. Fabricate of same material and finish as roofing metal.
- B. Form gutters and downspouts of rectangle profile and size indicated to collect and remove water. Fabricate with connection pieces.
- C. Form sections in maximum possible lengths. Hem exposed edges. Allow for expansion at joints.
- D. Fabricate support straps of same material and finish as roofing metal, color as selected.

2.10 FINISHES

- A. Framing Members: Clean, prepare, and shop prime. Do not prime surfaces to be field welded.
- B. Exterior Surfaces of Wall Components and Accessories: Precoated enamel on steel of modified silicone finish, paint color as selected from manufacturer's standard range.

- C. Interior Surfaces of Wall Components and Accessories: Precoated enamel on steel of modified silicone finish, paint color as selected from manufacturer's standard range.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that foundation, floor slab, mechanical and electrical utilities, and placed anchors are in correct position

3.02 ERECTION - FRAMING

- A. Erect framing in accordance with AISC 360.
- B. Provide for erection and wind loads. Provide temporary bracing to maintain structure plumb and in alignment until completion of erection and installation of permanent bracing. Locate braced bays as indicated.
- C. Set column base plates with non-shrink grout to achieve full plate bearing.
- D. Do not field cut or alter structural members without approval.
- E. After erection, prime welds, abrasions, and surfaces not shop primed.

3.03 ERECTION - WALL AND ROOF PANELS

- A. Install in accordance with manufacturer's instructions.
- B. Exercise care when cutting prefinished material to ensure cuttings do not remain on finish surface.
- C. Fasten cladding system to structural supports, aligned level and plumb.
- D. Locate end laps over supports. End laps minimum 2 inches. Place side laps over bearing.
- E. Provide expansion joints where indicated.
- F. Use concealed fasteners.
- G. Install insulation and vapor retarder utilizing Optiliner for attachment. Place wire mesh under vapor retarder for support between framing members.
- H. Install sealant and gaskets, providing weather tight installation.

3.04 ERECTION - GUTTERS AND DOWNSPOUTS

- A. Rigidly support and secure components. Join lengths with formed seams sealed watertight. Flash and seal gutters to downspouts.
- B. Pitch gutters down from middle of building to downspouts on each end.
- C. Install splash pads under each downspout.

3.05 INSTALLATION - ACCESSORY COMPONENTS IN WALL SYSTEM

- A. Install door frames, doors, and overhead doors in accordance with manufacturer's instructions.

3.06 TOLERANCES

- A. Framing Members: 1/4 inch from level; 1/8 inch from plumb.
- B. Siding and Roofing: 1/8 inch from true position.

END OF SECTION

**Pre-Bid Conference Minutes
Freezeout Lake WMA
Cold Storage Building
FWP #7179102**

March 27, 2018
10:00 am
Freezeout Lake WMA Office
Near Fairfield, Montana

Attendees:

<u>Affiliation</u>	<u>Name</u>	<u>Phone #</u>
Randall Reeve Construction	Randall Reeve	406-788-3732
Rocky Mountain Power	Matt Vollertsen	406-461-3922
Loenbro Electrical	Matt Nicola	406-564-7916
Cleary Building	Jim Gardner	406-750-8445
LeRoy Hanson Construction	LeRoy Hanson	406-590-2874
Teton Lumber	Clayton Perry	406-466-2228
Highmark Construction	Chad Bouman	406-590-3446
Harding Civil Construction	Trenton Harding	406-871-5040
Montana FWP	Phil Jagoda	406-841-4009
Montana FWP	Mark Schlepp	406-467-2646
Larson Civil Engineering, LLC	Jeff Larson	406-443-6111

Introduction:

Phil Jagoda was introduced as the FWP Project Manager, Mark Schlepp was introduced as the FWP Manager of the Freezeout Wildlife Management Area, and Jeff Larson was introduced as the Project Engineer.

- **Bid Date**
Bids will be opened on Thursday, April 5th, 2018, at 3:00 p.m., at the Montana Fish, Wildlife and Parks, Design and Construction Section Office in Helena.
- **Mail Bid to:**
Address to mail bids is 1522 9th Avenue, PO Box 200701, Helena, Montana 59620-0701.
- **Montana Gov Delivery:**
Bid documents are found on-line at:

<http://fwp.mt.gov/doingBusiness/DesignAndConstruction/upcomingBidOpenings.html>

Sign up on the FWP **Upcoming Bid Opening Page** to receive all changes to and updates to the website. Receive e-mail notification of new projects, addendums, and pre-bid sign-in sheets posted to the FWP website. (Sign up under **Design & Construction**; if you sign up under Fish, Wildlife & Parks it will give you everything happening in all of Montana Fish, Wildlife & Parks).

- **Contractor Registration**

Contractor Registration with the Department of Labor and Industry is not required to Bid the project. However, registration is required prior to signing contracts.

- **Bid Package Submittal**

Bid shall include all items listed in Instruction to Bidders including:

- Sealed envelope with project description and address
- Bid proposal
- Bid security
- Acknowledgement of Addenda

Bids can be modified or withdrawn up to the bid opening. Contractors were warned to make sure bids are sent early as the State Mail system can delay delivery of bids.

- **Bid Bond – 10% of Total Bid**

Bid security may be in the form of bid bonds, cashier's check, certified check, or bank money, order payable to the State of Montana. Personal checks will not be accepted.

- **Performance Bond and Labor and Materials Bond**

The successful bidder will be required to provide a Performance Bond and a Labor and Materials Bond in the amount of 100% of the bid.

- **Insurance**

The successful bidder will be required to provide insurance as listed in the Contract Documents. Liability insurance shall be \$1 million per occurrence and \$2 million aggregate. Insurance must cover vehicles used by the company. Listing the State of Montana as additional insured is required.

- **Review Proposal Items**

The base bid for this project includes the building and building foundation. The following are the additive alternates included in the bid proposal:

- Additive Alternate #1 – 14'x14' Overhead Door
- Additive Alternate #2 – Concrete Floor Slab
- Additive Alternate #3 – Concrete Sidewalk
- Additive Alternate #4 – Plywood Sheeting (on the interior of the building wall to a height of 8-feet)

All grading and earthwork outside of the building footprint and sidewalk subgrade will be provided by the Owner.

Award will be made to the lowest responsible bidder. Additive Alternates will be accepted in consecutive order.

- **Project Budget**

The construction budget for this project is roughly a \$118,000, excluding contingency. The project budget can not be exceeded as mandated by the legislature.

- **Fish, Wildlife and Parks Supplied Materials**

Fish, Wildlife and Parks is not supplying any materials on this project.

- **Project Schedule**

Contract time is 60 calendar days. Project will start after the contracts are signed, the building design is prepared, the building permit is obtained, and the building package is ready for delivery. The project completion is expected this summer, the building is needed for use in early fall.

- **Addenda**

To date there has been one addendum issued. This addendum allows a metal building package to be substituted for post and frame style construction.

A second addendum will be issued on Wednesday, March 28. The addendum will include and/or clarify detailed specification for the metal building package, roof panels shall be delta rib, a 3/4-inch wall panel thickness is acceptable, there is no soffit on the project, and the Owner is responsible for compaction testing of the parking lot.

- **Interpretations and Substitution Requests**

Interpretations and Substitution Requests are due in writing, by Wednesday, March 28th.

- **Montana Prevailing Wage Rates**

The project is subject to Montana Prevailing wage rates.

- **One Year Warranty**

The project is subject to a one-year warranty period.

- **Payment**

Pay Requests will be processed on a 30-day frequency. The standard 5% retainage will be withheld until the project is accepted as final. All payments are subject to the 1% Department of Revenue withholding.

- **As-Built Drawings**
The Contractor will be required to maintain a set of As-Built drawings; they are considered to be a part of the Close-out documents.
- **Supervision**
The Contractor is required to have a qualified supervisor on-site during construction.
- **Federal Debarment Form**
A Federal Debarment form is not required for this project.
- **Site Responsibilities**
Staking is the responsibility of the Contractor. Construction limits are limited to within the parking area surrounding the building site. Contractors were warned to avoid parking on or storing material on the drainfield.
- **Special Provisions and Drawings**
 - The Contractor is required to provide sanitary facilities for workers as described in Special Provision #12.
 - Construction Note #10 of the Drawings – Contractors were referred to testing frequencies and requirements.
 - Construction Note #11 of the Drawings – The Contractor is required to provide building drawings and structural calculations.
 - Construction Note #12 of the Drawings – The Contractor is required to obtain a building permit from the State,
 - Construction Note #13 of the Drawings – This note describes the source for backfill material in a state-owned pit about 1-1/2 miles from the site. Waste material can be spoiled in a berm about 400 yards from the site.
- **Wind Loads**
 - FWP mentioned the high winds that occur at this site and the importance of making sure the structural design uses the proper wind loadings.

Contractor Question and Answers:

Question: Does the Contractor choose whether the building will be post and frame or a metal building package?

Answer: Yes.

Question: Is sheeting required with the metal building package?

Answer: No, panels can span between framing members.

Question: The sheeting in additive alternate #4, plywood sheeting, requires change to the electrical installation? How will this be addressed.

Answer: This question will be answered in Addendum #2.

Question: Is a proctor available for the material in the state-owned pit?

Answer: No, it is the Contractors responsibility to obtain one.

Question: Are distances listed for the length of underground electrical power conductors?

Answer: No, but they can be scaled from the site plan.

Project Walkthrough:

Contractors were walked through the project area.